

INTERNATIONAL SEARCH REPORT

ational Application No

PCT/IB2004/000875

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B29C45/14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 B29C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 09, 31 July 1998 (1998-07-31) -& JP 10 103289 A (KUBOTA TEKKOSHO:KK), 21 April 1998 (1998-04-21) abstract; figures 2,3	1-7,9,10
X	PATENT ABSTRACTS OF JAPAN vol. 2003, no. 07, 3 July 2003 (2003-07-03) -& JP 2003 065424 A (KOYO SEIKO CO LTD), 5 March 2003 (2003-03-05) abstract; figure 1	1-7,9,10
X	US 4 580 757 A (LEUNER HILMAR ET AL) 8 April 1986 (1986-04-08) figure 1	1-7,9,10
	-/-	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

15 July 2004

Date of mailing of the international search report

22/07/2004

Name and mailing address of the ISA

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PCT/IB2004/000875

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 142 675 A (STORK JOSEF ET AL) 7 November 2000 (2000-11-07) figure 1 -----	1-7,9,10

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 8, 11, 12
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 8,11,12

Claims 8, 11 and 12 do not meet the requirements of Article 6 PCT, since the claims contain so many options, variables, possible permutations or provisos, that the claims are unclear or inconcise to the extent that the presentation of the claims obscures the subject matter for which protection is sought.

Reference is made to Rule 6.2 PCT, according to which claims shall not, except where absolutely necessary, rely, in respect of the technical features of the invention, on references to the description or drawings. In particular, they shall not rely on such references as: "as described in part ... of the description," or "as illustrated in figure ... of the drawings.".

This issue is further explained in chapter 5.10 of the PCT INTERNATIONAL SEARCH AND PRELIMINARY EXAMINATION GUIDELINES, according to which the claims must not, in respect of the technical features of the invention, rely on references to the description or drawings "except where absolutely necessary." An example of an exception would be that in which the invention as claimed involved some peculiar shape illustrated in the drawings but which could not be readily defined either in words or by a simple mathematical formula.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB2004/000875

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
JP 10103289	A	21-04-1998	JP	3000344 B2	17-01-2000
JP 2003065424	A	05-03-2003	NONE		
US 4580757	A	08-04-1986	DE	3339355 A1	27-06-1985
			FR	2554041 A1	03-05-1985
			JP	1784339 C	31-08-1993
			JP	4075806 B	01-12-1992
			JP	60116503 A	24-06-1985
US 6142675	A	07-11-2000	DE	29805581 U1	28-05-1998
			FR	2776561 A1	01-10-1999
			IT	T0990226 A1	25-09-2000
			JP	11325052 A	26-11-1999